PROJECT: 15-1049 PLN, IVERSON PRESERVE STAKEHOLDER INTEGRATION

Sponsor: Island Co. Dept. Natural Res. Program: Puget Sound Acq. & Restoration Status: Active
Project Start Date: 12/09/2015 Agreement End Date: 06/29/2018

Final Report Status: Accepted 11/05/2018

Description

PROJECT AGREEMENT DESCRIPTION

This project will build upon the two previous feasibility studies for the Iverson Marsh (Phillip Williams and Associates, 2001 and Sheldon & Associates, 2001) to further address the feasibility of restoring inter-tidal marsh at Iverson Marsh. The project area is approximately 120 acres and consists of 3,200 linear feet of shoreline with one hundred acres currently diked, drained and farmed for hay. It is located on the western edge of Livingston Bay on Camano Island, and in WRIA 6 High Priority Geographic Area 1 (ICSRP 2005, p. 27).

The 2001 feasibility studies included restoration alternatives and recommended that additional studies ensue to evaluate potential flood hazard risks to neighboring properties from proposed restoration actions. The main goal of this project is to integrate the stakeholder's concerns into an acceptable restoration alternative. Island County is interested in balancing the community's concerns with improving habitat for listed species and water quality. Staff will facilitate neighborhood/stakeholder meetings to work with existing plans and information from feasibility studies to inform the landowners to reach a consensus on alternatives to model and evaluate risks, and to explain the site restoration benefits to advance habitat restoration actions at Iverson Preserve.

The completed restoration project would improve feeding and rearing habitat for out-migrating juvenile salmon.

FINAL PROJECT DESCRIPTION

Island County initiated the Iverson Stakeholder Integration Project with the main goal of working with community members to evaluate the possibilities of developing a multi-benefit project that balances the needs of community with a habitat gain for listed species at Iverson Preserve.

The Project had two concurrent phases, one was the data collection and synthesis of sedimentation and groundwater interactions for the Iverson Preserve and the second was the stakeholder integration phase intended to define the most successful community-approved alternative of conceptual design. The data collection and synthesis characterization was to assist with the assessments of current drainage issues and determine acceptable alternatives for restoration at this site. Island County Public Works will make the final decision on any upcoming drainage improvements at Iverson Preserve. The community-led conversation attempted to come up with creative recommendations that could be incorporated into a multi-benefit project.

The Iverson Task Force is a self-selected group of 27 members comprised of park patrons, Long Beach residents, Island County staff, Audubon/birding interest, Friends of Camano Island Parks, and the Mosquito Board. The group was formed to assess community values, vet concerns, and discuss creative, potential, multi-benefit solutions that could be possible at Iverson Preserve. The group came together for 12 meetings to gather relevant information for discussions on potential solutions for drainage and habitat improvements.

The Task Force had two brainstorming sessions to discuss general thoughts and possible solutions for drainage and habitat improvements at the Preserve. A map of the Iverson Preserve was used to write down ideas and sketch out potential solutions. Jim Johannessen with Coastal Geologic Services provided feedback on some of these ideas from an engineering perspective.

Overall impressions:

- Assumptions about the drainage from the marsh becoming slower and less effective have been confirmed by the CGS data.
- The spit has extended so the outfall must travel further to drain into Port Susan. CGS has found that there is significant increase in sedimentation since 1954.
- The existing channel may break through the south end of the spit (known as a "channel avulsion"), which these types of systems have been known to do, and exit into a deeper part of Port Susan closer to the homes on the spit. This would effectively shorten the channel and may improve drainage efficiency. It would also, however, alter the existing tidal circulation and existing habitat in the marsh.
- The difference in the sand texture is drastic. It used to be that you didn't sink when you walked out to the spit; now you sink in mud very quickly
- The tidal channel and ditches needs the flow behind the tide gate to allow flushing.

Tide gates:

- A new tide gate through the Iverson Preserve to Port Susan from parking lot (west to east) may be a good drainage solution. This would shorten the distance the field water has to travel and will be discharged to deeper water.
- Create new outfalls across County easements below the spit and pump the field water to the area in front of the houses.
- Use the old tide gate (~pre 1980s) on south tip (probably hadn't worked since 1950s) to drain out water to the south.
- Remove material from the front of the beach and put it back into the marsh.

Ditches, beavers and mosquitos:

- The purpose of the ditch was to get the water out when flooded. Since it is no longer working, it could be filled to remove the mosquito problem.
- Jay Lawrence shared droned photography of the Iverson marsh flooded fields and beaver dam from Friday, May 18th, 2017.
- The beaver dam causes more flooding in the fields causing more mosquitos. Usually, in an ecosystem, you would have fish feeding on mosquito larvae. The fish are being blocked from entering the marsh area. Engineering the area to be a more natural habitat would take care of the mosquitos.
- One of the ideas for getting rid of beavers was to increase the tidal influence. There are tidal tolerant beavers; therefore, increasing tidal activity will likely not repel them.
- Making the pond deeper would improve habitat (for fish) and may help improve field drainage.
- Create a channel along the bluff toe to intercept water from upland areas and drain it out before it gets farther east. The ditch at the base of the bluff should be fixed to help the drainage.
- Half of the road is blocked by a berm. The field ditch along the road is filled with the water from the field, not overwash from the Bay. Ditches need to be cleaned out.
- If you can build some ditches and re-shrub the field, you would improve the drainage and prevent invasive species from growing.
- Cover the "front ditch" (along the road) and have drainage flow the direction of the park; educate the residents to not throw grass clippings into the ditch.

Funding opportunities:

- There is general support for maintaining flow in the marsh, and having a back-up system that flows out near the parking lot.
- Island County Conservation Futures Maintenance and Operations funds could be used for some of the pieces but this type of project could be very expensive. It is unlikely that Salmon Recovery Funding Board funding would pay for these changes unless the tide gate is opened to increase salmon habitat. Ducks Unlimited would only be interested in funding this if there was increased hunting capacity. National Oceanic and Atmospheric Administration has funding for community resiliency for protecting properties from coastal flood risk.
- There are mosquito control grants that could help pay for the mosquito control part of the project.

• The National Coastal Resilience Fund is a national program with a regional focus and targets specific circumstances, needs and priorities. This fund aims to benefit coastal communities by reducing the impact of coastal flooding and associated threats to property and key assets, such as hospitals and emergency routes; benefit coastal communities by improving water quality and recreational opportunities; and benefit fish and wildlife by enhancing the ecological integrity and functionality of coastal and inland ecosystems. This funding source may be a good fit for the Iverson Preserve area.

Considering the community concerns and interest in surface water improvements, it seems that there are some viable alternatives for incorporating drainage improvements/modifications at Iverson Preserve. Depending on the conceptual design, there may also be significant habitat improvements at this site. The project report, Iverson Preserve and Livingston Bay: Sedimentation, Groundwater Data Collection and Synthesis (Coastal Geologic Services 2017), includes the following recommendations for determining management options for balancing drainage improvements with potential habitat improvements at this site:
• Evaluate, in more detail different scenarios for management including:
o replacement of the tide gate with a larger gate
o dike setback to reduce the volume of impounded water to drain allow for sedimentation in a broader area, and facilitate habitat enhancement
o projections of future conditions
• Perform conceptual design work using current and new data, hydraulic modeling, and planning level cost estimates for different alternatives.
• Qualitatively (and potentially quantitatively) evaluate likely nearshore habitat benefits of conceptual alternatives outlined immediately above.
• Evaluate the feasibility of adapting the road access, tide gate, and drainage network for projected sea level rise and site evolution.
Recommended next steps for the Iverson Preserve are to utilize the Iverson Preserve and Livingston Bay: Sedimentation, Groundwater Data Collection and Synthesis report and the Iverson Stakeholder Integration summary to develop 2-3 conceptual designs, including information on permitting restrictions and cost-benefit analysis for each scenario. The Iverson Task Force and the Iverson community may be utilized to vet the conceptual designs to help select a preferred alternative to ensure a community supported and multi-benefit project is selected as the preferred alternative. Depending on the preferred alternative, funding sources may be available for project design, permitting and implementation.

Narrative

Island County initiated the Iverson Stakeholder Integration Project with the main goal of working with community members to evaluate the possibilities of developing a multi-benefit project that balances the needs of community with a habitat gain for listed species at Iverson Preserve. There were concerned citizens identified in the 2010 Iverson Management Plan project. Island County DNR staff made outreach to these residents in advanced of the project proposal to ensure that we heard their concerns and we opened a clear channel of communication for transparent information as the project developed. The most potentially oppositional residents were contacted and were asked to have a meeting over coffee at their house. The goal was to inform them of the project, the deliverables (conversations and engineered studies) and the process.

The Iverson Stakeholder Integration Project had two concurrent phases, one was the data collection and synthesis of sedimentation and groundwater interactions for the Iverson Preserve and the second was the stakeholder integration phase intended to define the most successful community-approved alternative of conceptual design. The data collection and synthesis characterization was to assist with the assessments of current drainage issues and determine acceptable alternatives for restoration at this site. Island County Public Works will make the final decision on any upcoming drainage improvements at Iverson Preserve. The community-led conversation attempted to come up with creative recommendations that could be incorporated into a multi-benefit project.

The Iverson Task Force is a self-selected group of 27 members comprised of park patrons, Long Beach residents, Island County staff, Audubon/birding interest, Friends of Camano Island Parks, and the Mosquito Board. The group was formed to assess community values, vet concerns, and discuss creative, potential, multi-benefit solutions that could be possible at Iverson Preserve. The group came together for 12 meetings to gather relevant information for discussions on potential solutions for drainage and habitat improvements. The recommendations from the Iverson Stakeholder Integration Project are laid out in this report.

A portion of the Preserve consists of a relic salt marsh that has been diked and ditched for agricultural purposes and is referred to in this report as the ‘field’. The Preserve also supports an emergent salt march and estuarine channels north of the dike and is referred to in this report as the ‘marsh’. The dike at Iverson Preserve was built prior to the 1940’s and drains the field through a tide gate. Since 1999, the land behind the dike has been owned and managed by Island County Public Works, Parks Department, and managed as park land. The land form that is now Iverson Preserve and the Long Beach Community is the result of both a natural buildup of a spit as well as the accumulation of silt from Livingston Bay and erosion of the island itself. An early sketch of the area shows inlets and channels consistent with a salt marsh habitat in what is now the field. More drainage work was done in the 1980’s with tiles and the resulting land became a mix of farmland, and brackish wetlands. Island County purchased about 300 acres for the purpose of habitat conservation in 1999. Studies were commissioned in 2001 to determine the potential to recover marine saltmarsh habitat while preserving flood protection for Long Beach homeowners. Island County is interested in balancing the community’s flooding concerns and maintaining the area for the enjoyment of Preserve patrons with improving wildlife habitat, including ESA-listed species, and water quality.

A series of presentations by subject matter experts were made to the Task Force in order to increase awareness and knowledge of different concepts and components that may inform conversations about the nearshore dynamics of flooding and habitat creation in the Preserve. The Task Force also took field trips to two local restoration sites to hear about projects that were developed to address flooding, drainage and habitat.

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Lessons learned: Our pre-project outreach approach to try to target known concerned citizens from previous public meetings and public comment created some distrust with other residents living in the Iverson community. Some residents heard about the project proposal from others and felt like there was work going on behind their backs. We

addressed this issue at the project kickoff meeting. We asked if they would rather be notified of a potential project (pre to grant approval), knowing that it might not go anywhere if grant isn't approved. The consensus was that they wanted to be involved from the beginning and some wanted to help shape the project that was being applied for.
We also learned that it is important to educated county staff who may get questions (other departments). Our Parks ranger needed to have better information earlier in the pre application process because he was the one who was in contact with the community more often and he had a trust relationship built already. After learning this, we kept him close to all conversations and decisions. He also helped managing gossip and rumors throughout the project.
Our outreach mediums proved to be very successful in reaching a broad user group for the park. We sent direct mailers (auditors database), made phone calls, distributed information with the water utility (Long Beach Water Association) distribution list, put up flyers at library, and put details in the local newspapers (Everett Herald, Crab Cracker and Whidbey Newstimes). This ensured that we reached the residents in the project area and also the people who use Iverson Park. We had a well rounded and diverse stakeholder group for the project which proved to be valuable for the discussions and recommendations.

It became clear that definitions of common words are very important. We had to define the difference between what we meant by "inundation" and "flooding". Staff was using "inundation" to refer to any purposeful reintroduction of marine water into the marsh and "flooding" to refer to the unwanted overtopping of marine water into home lots by storm surge and exceptionally high tides. But a few landowners thought that "flooding" referred to the purposeful breaching of the tidegate or dike into the marsh. Hence, they were under the misunderstanding that staff was still talking about breaching the dike or tidegate for habitat when the staff was trying to address the risk posed by storm surge. Likewise, staff referred to this Iverson Stakeholder Integration Project as the "project". But "project" meant 'dirt – moving' to other project managers on the Task Force and led to confusion about 'project outcomes' and certain landowners thought because the staff was talking about 'the project', that we, in fact, did have a construction project and goals in mind despite our assurances otherwise. Agreement on definition of terms is critical when dealing with individuals from a variety of backgrounds.

To keep the group focused on the project outcomes, we had to form subcommittees to address concerns that needed to be voiced but were not directly related. A subcommittee was formed to act as repository for the concerns pertaining to roads and park management. Much of the conversation the first meeting was dominated by strongly felt opinions regarding the increased park use and resulting traffic. In order to maintain the focus on the hydrology concerns, but to also capture the park concerns, discussions and ideas were forwarded to that subcommittee. DNR staff offered to help with the facilitation of this committee but was directed by supervisors not to spend capacity as the park concerns were considered outside the scope of the grant funding for the Iverson Stakeholder Integration Project. While necessary to remain focus on the hydrology at Iverson, the division of the group was seen by the individuals with the park concerns as the County not addressing them and being divided into "not my job" silos. Independent discussions with these individuals has not proved to be effective. Letters from this household asking for the dissolution of this project were sent to the Commissioners and then to the State Representative for the area. Relationships with the Commissioners and the State Representatives had been previously established through watershed tours and with direct communication about this project with Commissioners. This enabled staff the opportunity to correct the misperceptions and inaccurate information in the letters of complaint before any action was taken. Maintaining contact with the elected officials and providing transparent communications before and during the project helped to mitigate rumors and concerns.

Worksites

Worksite #1: Iverson Marsh

Worksite Address (Optional)

Street Address 3 Iverson Road
City Camano Island
State, Zip WA 98282

Worksite Details

Worksite #1: Iverson Marsh

Worksite Name Iverson Marsh

WORKSITE DESCRIPTION

The project area is approximately 120 acres and consists of 3,200 linear feet of shoreline with one hundred acres currently diked and drained and farmed for hay. It is located on the western edge of Livingston Bay on Camano Island situated due west of the mouth of the Stillaguamish River. This is located in WRIA 6 High Priority Geographic Area 1 (ICSRP 2005, p. 27). This phase of the project will include feasibility only.

Geographic Coordinates

From mapped point:	Latitude	48.212762	Longitude	-122.447467
For Directions:	Latitude	48.211275	Longitude	-122.444278

SITE ACCESS DIRECTIONS

From I-5, take exit 212 to SR 532 west. Stay on SR 532 west through Stanwood and cross onto Camano Island. Turn left off of SR 532 (about 4 miles past Stanwood) onto Sunrise Boulevard. After 2.5 miles turn left on east Iverson Beach Road. At 0.2 miles turn left to stay on east Iverson Beach Road, then quickly turn left again onto S. Iverson Rd. Drive to the end of the road to the county park.

Properties

The selected project has no properties

Planning Metrics

Worksite: Iverson Marsh (#1)

	Current Agreement	Final
Targeted salmonid ESU/DPS (A.23) The salmon ESU (Evolutionarily Significant Unit) or steelhead DPS (Distinct Population Segment) name that the project is targeting. For species where ESU/DPS name is not known or determined, use the species name with unidentified ESU (e.g., Chinook salmon - unidentified ESU).	No Salmon ESU or Steelhead DPS ✓ Chinook Salmon-Puget Sound ESU Chinook Salmon-unidentified ESU ✓ Chum Salmon-Puget Sound/Strait of Georgia ESU Chum Salmon-unidentified ESU ✓ Coho Salmon-Puget Sound/Strait of Georgia ESU Coho Salmon-unidentified ESU ✓ Pink Salmon-Odd year ESU Pink Salmon-unidentified ESU Steelhead-Puget Sound DPS Steelhead/Trout-unidentified DPS	No Salmon ESU or Steelhead DPS ✓ Chinook Salmon-Puget Sound ESU Chinook Salmon-unidentified ESU ✓ Chum Salmon-Puget Sound/Strait of Georgia ESU Chum Salmon-unidentified ESU ✓ Coho Salmon-Puget Sound/Strait of Georgia ESU Coho Salmon-unidentified ESU ✓ Pink Salmon-Odd year ESU Pink Salmon-unidentified ESU Steelhead-Puget Sound DPS Steelhead/Trout-unidentified DPS
Area Encompassed (acres) (B.0.b.1) Acres of land area affected by the planning and assessment activities (to the nearest 0.1 acre). For design projects, this is the project footprint. For assessments, this is the area to be assessed.	120.0	120.0
Targeted species (non-ESU species) Select one or more of the fish species that this project will benefit.	None Unknown Brook Trout Brown Trout ✓ Bull Trout Cutthroat Kokanee Rainbow ✓ Searun Cutthroat	None Unknown Brook Trout Brown Trout ✓ Bull Trout Cutthroat Kokanee Rainbow ✓ Searun Cutthroat
Miles of Stream and/or Shoreline Affected (B.0.b.2) The miles of freshwater stream and/or marine shoreline affected (to the nearest 0.01 mile). For design projects, the miles in the project footprint. For assessments, the miles to be assessed.	0.01	0.01

Restoration Planning And Coordination Project

Projects that develop, maintain or coordinate implementation of Recovery Plans, restoration plans, subbasin plans, and monitoring/sampling plans. This includes support to Watershed Councils, local restoration entities, and tribes; designing and evaluating restoration plans; conducting feasibility studies; developing action plans; and management/enforcement of habitat protection ordinances and regulations.

Conducting habitat restoration scoping and feasibility studies (B.1.b.8)
Conducting habitat restoration scoping, feasibility studies, and conceptual designs.

Total cost for Conducting habitat restoration scoping and feasibility studies Enter the cost (to the nearest dollar) of this work type, as close as you can reasonably get it.	$123,300	*Not Collected at Closure*
Project Identified in a Plan or Watershed Assessment (B.1.b.8.a) Name of the Recovery Plan that identifies the need or justification for conducting this project. If not identified in Recovery Plan, name the watershed assessment or other plan which justifies the need for the project. Use endnote citation format (Author, date, title, source, source address). If project was not identified in a plan, enter "none." (500 characters max).		
Priority in Recovery Plan (B.1.b.8.b) (1211) Priority in Recovery Plan. How is the project prioritized or justified by the above plan? (i.e. addresses a priority action, occurs in a priority area, or targets a priority species). Include page reference. If project was not identified in a Plan, enter 'None'		

Name and Description of Plan (2299)
Name and brief description of the plan that was developed. If no plan was developed, enter "None".

Overall Metrics

	Current Agreement	Final
Completion Date		
Projected date of completion Estimated date the scope of work will be completed.	12/31/201	06/30/201

Project Goals

Goals, purpose, and expected benefits (A.17)
Short description of the goals and purpose of the project and how it is expected to benefit salmonids or salmonid habitat.

Planning Costs

Final amounts include a pending billing
Date of Last Released Billing 05/21/2018

Worksite: Iverson Marsh (#1)

		Proposed	Final
	SPLIT OUT FINAL TOTAL BELOW	$123,300.00	$126,326.76
Planning/Coordination Costs (B.1.a)		$123,300	$126,327
	Difference		$0

Billed Summary

Final amounts include a pending billing
Date of Last Released Billing 05/21/2018

Category	Project Agreement RCO	Project Agreement Total	Totals To Date Expended	Totals To Date Non Reimbursable	Totals To Date Total Billed
Non-Capital					
Non-Capital Costs			107,830.29	18,496.46	126,326.76
Equipment					
Non-Capital Total	**104,805.00**	**123,300.00**	**107,830.29**	**18,496.46**	**126,326.76**
Total	104,805.00	123,300.00	107,830.29	18,496.46	126,326.76

Sponsor Match

		Proposed	Final
Project Funding			
PCSRF Federal Funds (A.10)			
State Funds (A.11)		$104,805.00	$99,564.75
Pending Billing - RCO Share Approved			$0.00
Retainage - RCO amount retained			$5,240.25
Sponsor Match: Monetary Funding			
Amount of other monetary funding (A.12)		$0	$0
Source of other monetary funding (A.12.a)			
Sponsor Match: Donated Un-paid Labor (volunteers)			
Value of Donated Unpaid Labor (Volunteers) (A.13.a.2)		$5,000	$6,840
Source of Donated Un-paid labor contributions (A.13.a.4)			
Number of hours volunteers contributed to the project (A.13.a.1)		*Collected at Closure*	456
Describe how the value of the volunteers was determined (A.13.a.3)		*Collected at Closure*	
Sponsor Match: Donated Paid Labor			
Value of Donated Paid Labor (A.13.b.1)		$13,495	$14,682
Source of Donated Paid Contributions (A.13.b.2)			
Sponsor Match: Other In-kind Contributions			
Value of Other In-Kind Contributions (A.13.c.1)		$0	$0
Source of Other In-Kind Contributions (A.13.c.3)			
Description of other In-Kind contributions (A.13.c.2)			
	Amount Total	$123,300	$126,327
	Total Billed		$126,327
	Difference		$0

Attachments

PHOTOS (JPG, GIF)

FILES AND PHOTOS

File Type	Attach Date	Attachment Type	Title	Person	File Name, Number Associations	Shared
No attachments match filter criteria						

Certify & Submit

Status History

Report Status	Date	User	Note
Accepted	11/05/2018	Marc Duboiski	Thank you!
Submitted	10/31/2018	Lori Clark	Thank you (and Leon) for your help getting this submitted today!
Draft	10/29/2018	Lori Clark	